020

EXECUTIVE INNOVATION LAB IN DIABETES AND PREDIABETES

MAIN PRE-READER





TABLE OF CONTENTS

THE ROOTS OF d20: How Stigma Emerged as a Key Lever for Change
Diabetes Stigma: Background and Primer
An Introduction to Framing with the FrameWorks Institute
APPENDIX A: Diabetes Ecosystem Map 10
APPENDIX B: Systems Mapping Process with Scott Spann–Interviews with Experts 11
APPENDIX C: Tools and Terms from Prior dSeries Events

THE ROOTS OF d20: How Stigma Emerged as a Key Lever for Change

Since 2016, the diaTribe Foundation has held annual meetings with leaders across the diabetes ecosystem to learn about the type 2 diabetes epidemic and engage in high-impact, aligned action. These meetings have served as opportunities to delve in and better understand the epidemic as a highly complex, systemic problem, and to recognize that developing solutions requires a more rigorous understanding of the factors contributing to the crisis.

Thus, for its d19 annual meeting, diaTribe invested in a formal systems-mapping project to identify where we can act to make a lasting impact on the type 2 diabetes epidemic (<u>Appendix A</u>). Through in-depth interviews with over 20 leaders in diabetes, epidemiology, and public health (<u>Appendix B</u>), we created a diabetes ecosystems map of over 100 interconnected elements that provide insight into what changes can be made to reduce the size and impact of the epidemic.

At d19 itself, a group of leaders from several dozen organizations learned about systems-level thinking (Appendix C) and worked with systems mapping expert Scott Spann to understand the complex factors at play and to design strategies for change. The d19 participants identified their top seventeen levers that they deemed would be the most feasible and most impactful to the system. Scott then narrowed the results to the nine levers with highest potential to prompt meaningful disruption of the epidemic. Below are the identified levers, with the top nine in bold:

- Impact of Stigma
- Ability to Design Food Systems for Optimal Health

- Ability to Design Political/Economic Systems for Optimal Health
- Quality and Quantity of Critical Mass of Type 2 Diabetes and Obesity Decision Makers
- Ability to Influence Those at Risk and Those Most Impacted
- Ability to Diagnose Those at Risk
- Ability to Mobilize Those at Risk and Those Most Impacted
- Quality and Quantity of Critical Mass with Access to Diabetes and Obesity Healthcare
- Ability to Transition the Medical System
- Ability to Design Urban and Rural Built Environments for Optimal Health
- Ability to Scale the Movement
- Quality and Quantity of Healthy Outrage
- Ability to Design/Structure Systems for Optimal Health
- Quality and Quantity of Food System Profitability
- Ability to Design and Activate a Catalytic Social Movement
- Ability to Design Behavioral Systems for Optimal Health
- Quality and Quantity of Optimal Health Food System Access

The identification of these top levers allowed individuals to situate themselves within the map and identify where they or their organization could begin to prompt systems-level change. We then broke into working groups to evaluate each lever and to develop potential strategies for using these levers to bend the curve on the diabetes epidemic.

The First Domino: Eliminating Stigma

After d19, diaTribe and the dNetwork steering committee worked to synthesize the rich ideas for systemic action that arose at d19, drawing lessons from other social movement successes. In this process, it became clear that addressing stigma—and the narratives that perpetuate it—is one of the most powerful steps our multi-stakeholder group can take to impact the diabetes epidemic.

Diabetes stigma and discrimination work to prevent people with and at risk for diabetes from seeking and receiving necessary treatment. Stigma also contributes to a lack of openness about having diabetes, which impacts public perception of the severity of the problem and our ability to mobilize for collective action and policy solutions. Therefore, our theory of change for d20 and beyond is that working together to address diabetes stigma is crucial to catalyzing the changes needed across all parts of the diabetes ecosystem—from food and healthcare policy to treatments and behavior change interventions among patients, those at risk, and healthcare providers.

At d20, we will address how we can begin dismantling stigma and discrimination in diabetes. Our first step is to create a shared narrative—a cross-sector understanding—of how to think and talk about diabetes in order to reduce stigma and promote better health. We aim to create a narrative that reframes diabetes as a large-scale social problem that demands more targeted discussions and solutions.

Diabetes Stigma: Background and Primer

What is Stigma?

Stigma is the negative attitudes or discrimination against someone based on a distinguishing characteristic. Such attributes may be visible or invisible, controllable or uncontrollable, and linked to appearance, behavior, or group membership.¹ Evidence shows that stigma is a significant source of stress and social disadvantage for the affected individuals, and it is a driver of morbidity and mortality at the population level.²

Perceived stigma refers to a person's understanding of how others may act towards and think about an individual with a certain characteristic.³ Anticipated stigma refers to expectations of stigma experiences happening in the future.⁴

There is also a distinction between "felt" (internal) and "enacted" (external) stigma.

Enacted stigma is the experience of unfair treatment by others toward affected individuals and can affect their ability to access care and treatment. Examples of enacted stigma can range from a person with diabetes who feels shame when someone asks if they "really need another cookie," to a person with diabetes being passed over for a job promotion at least in part because of their condition.

Felt stigma is the shame and self-judgment of the affected individuals themselves. It can prevent people from seeking care, and it can lead them to blame themselves for the stigma and mistreatment that they experience. Example of felt stigma include a person with diabetes who feels guilty when they have another cookie in the privacy of their own home, or a person with diabetes who places judgement and blame on other people with the same condition.⁵ Felt stigma is particularly relevant to people with type 2 diabetes, who express feelings of failure, guilt, and self-blame.⁶ Regardless of whether stigma is internal or external, its resulting discrimination causes harm.

What Do We Mean When We Say "Diabetes Stigma"?

Diabetes stigma refers to experiences of exclusion, rejection, prejudice, or blame that patients unfairly experience due to their condition. The experience of stigma also disproportionately affects those with a higher BMI, higher A1C (and lower time-in-range), and poorer self-reported blood glucose control.⁷

Many people without diabetes underappreciate the impact of type 1 and type 2 diabetes stigma.

For example, Schabert et al. found that healthcare

professionals generally do not recognize diabetes as a stigmatized condition. People with diabetes, however, have reported feelings of fear of social embarrassment, rejection, being treated differently, and guilt associated with behaviors such as injecting insulin or refusing unhealthy food options at social events.² Moreover, adults with diabetes have reported that stigma and discrimination exists in the workplace, in travel, in maintaining friendships, and even in adopting children.¹

Diabetes stigma stems largely from the belief that individual behavior and poor choices result in developing diabetes. However, this not only engenders misplaced judgment, blame, and contempt toward those individuals, but it also detracts attention from other contributing factors, including genetics, the environment, and socioeconomic influences.

Does Diabetes in the USA Come with Social Stigma? by diabetes type and therapy



Source: Folias AE, Brown AS, Carvalho J, et al. Investigation of the Presence and Impact of Social Stigma in People with Diabetes in the USA. Poster presented at: American Diabetes Association 74th Scientific Sessions; 2014 June 13–17. San Francisco, CA.



Percentage of Respondents Who Strongly Agree with <u>any</u> of the following that "Other People's Perception of Diabetes has Made it More Difficult for Me to..."

- "be open about my diabetes with friends and family"
- "find a community to help me manage my diabetes"
- "make friends and enjoy a full social life"
- "succeed at work"
- "find support or share ideas about diabetes"



Source: Folias AE, Brown AS, Carvalho J, et al. Investigation of the Presence and Impact of Social Stigma in People with Diabetes in the USA. Poster presented at: American Diabetes Association 74th Scientific Sessions; 2014 June 13–17. San Francisco, CA.

What are the Causes of Type 1 Diabetes Stigma, Type 2 Diabetes Stigma, and Obesity Stigma?

It is important to acknowledge that diabetes stigma intersects with stigma resulting from race, class, disability, and gender. Perhaps most frequently, diabetes stigma—particularly type 2 diabetes stigma—is also often conflated with obesity and weight stigma.

Type 2 diabetes stigma and obesity stigma share several characteristics. Both conditions carry the stigma of assumed personal responsibility; that is, public perceptions attribute type 2 diabetes to poor choices, assuming that individuals brought the condition upon themselves. Obesity, and often type 2 diabetes, also bear the stigma of disfigurement: because their condition is often highly visible—looking "fat"—people with type 2 diabetes and obesity may face stigmatization due to their appearance.

While type 1 diabetes generally does not bear the stigma of assumed personal responsibility, it does share a certain degree of stigma with type 2 diabetes and obesity. First, all three conditions can carry the general stigma of being sick, which may lead to the perception of being "other." In addition, type 1 diabetes has an element of visibility, given the increased use of MDI or pump therapy, frequent blood glucose testing, and/or use of a continuous glucose monitoring device, all of which can be seen by others. Liu et al. found that the perception of diabetes stigma among people with type 2 diabetes significantly increased with greater therapy intensity, which may explain a cause of stigma towards people with type 1 diabetes, as well.

Thus, some elements of diabetes stigma, especially of type 2 diabetes stigma, result from obesity and weight stigma, whereas others are distinct to diabetes alone.

There are several groups working specifically on weight stigma, including the <u>Obesity Action</u> <u>Coalition</u>, the <u>Obesity, Metabolism, and Nutrition</u> <u>Institute at Massachusetts General Hospital</u>, and the <u>Rudd Center for Food Policy & Obesity, University</u> <u>of Connecticut</u>.

While we will consider the contribution of weight stigma to diabetes stigma, d20 will be focused on diabetes stigma specifically.

How does Stigma Impact Health Outcomes?

Stigma, regardless of its cause, can result in discrimination and prejudice. These manifestations of stigma then often lead to poorer health outcomes.



While some may claim that diabetes and weight stigma motivate people to eat better and exercise more, research has shown that stigma can actually have the opposite effect. Studies have found that adults who experience weight stigma engage in more frequent binge eating and are at increased risk for maladaptive eating patterns and eating disorder symptoms.⁸

Moreover, people with diabetes report feelings of fear, embarrassment, blame, guilt, anxiety, and low self-esteem as a result of being stigmatized. These negative emotions can result in depression and higher levels of stress, which in turn are correlated with an increased rate of complications such as retinopathy, macrovascular problems, and sexual dysfunction.¹ Thus, the internalization of stigma can result in less effective diabetes management.

In addition, people with type 1 and type 2 diabetes may attempt to conceal their diabetes management to avoid further stigmatization. Schabert et al. describe this phenomenon as a "culture of surveillance," in which people with diabetes are often made to feel entirely responsible for controlling their glucose levels-despite the many factors that affect those levels that may be out of their control-and their anxiety over harsh judgments can prompt efforts to conceal the basic management of their condition. For example, people with diabetes have reported avoiding social activities, injecting insulin only in public restrooms or at home (and thus delaying or omitting injections), making unhealthy food choices to avoid declining what is offered, and, when possible, manipulating glucose diaries and data to avoid condemnation from significant others or healthcare professionals. Such behavior indicates that stigma and prejudice may cause sub-optimal self-care.

Stigma may also inhibit people from seeking necessary care, particularly when the stigma is harbored and expressed by healthcare professionals. In a study of people with obesity in Australia, half of the patients who have overweight or obesity reported having been humiliated by, or having received derogatory comments from, healthcare professionals.⁹ Individuals who reported being blamed for their diabetes by others also reported a lower frequency of A1C checks and a longer period since their last eye health check.¹⁰ Other studies of mental illness have shown that anticipated stigma from healthcare providers contributes to people's reluctance to seek care, compromised patient–provider relationships, and early termination of treatment.¹¹

Why Should We Work on Diabetes Stigma?

Stigma is problematic and creates barriers at nearly every step of the diabetes pathway. The possibility of stigmatization and judgment discourages individuals to undergo screening and diagnosis for fear of being labeled as a "diabetic." Once diagnosed, people with diabetes may not adhere to their medication regimen nor properly monitor their blood glucose in order to avoid judgment from others.² After years of living with diabetes, people with diabetes may also accumulate increasing mental and emotional stress due to the associated stigma, in turn leading to increased risk of complications and worse health outcomes.¹ Finally, as we have learned from other social movements such as the LGBTQ+ rights movement, stigma, discrimination, and concealment hamper our ability to enact effective collective action to bend the curve on the diabetes epidemic.

Thus, it is impossible to make significant progress in diabetes without first eliminating stigma among people with and without diabetes.

By reducing external and internal stigma, people with diabetes are afforded more self-efficacy and control over their health, freedom from judgment and surveillance, and more power to change the systems that are contributing to the diabetes epidemic in the U.S.

Endnotes

- ¹ Major B, O'Brien LT. The social psychology of stigma. *Annu Rev Psychol.* 2005;56(1):393–421.
- ² Hatzenbuehler ML, Phelan JC, Link BG. Stigma as a Fundamental Cause of Population Health Inequalities. *American Journal of Public Health*, 103(5), 813–821.
- ³ Zelaya CE, Sivaram S, Johnson SC, Srikrishnan AK, Suniti S, Celentano DD. Measurement of self, experienced, and perceived HIV/AIDS stigma using parallel scales in Chennai, India. *AIDS Care*. 2012; 24:846–55.
- ⁴ Earnshaw VA, Smith LR, Chaudoir SR, Amico KR, Copenhaver MM. HIV stigma mechanisms and well-being among PLWH: a test of the HIV stigma framework. *AIDS Behav.* 2013; 17:1785–95.
- ⁵ Schabert J, Browne JL, Mosely K, et al. Social Stigma in Diabetes: A Framework to Understand a Growing Problem for an Increasing Epidemic. *Patient* (2013) 6:1–10.
- ⁶ Shiu AT, Kwan JY, Wong RY. Social stigma as a barrier to diabetes self-management: implications for multi-level interventions. *Journal* of *Clinical Nursing*. 2003; 12:149–150.
- ⁷ Liu NF, Brown AS, Folias AE, et al. Stigma in People with Type 1 or Type 2 Diabetes. *Clin Diabetes*. 2017 Jan; 35(1): 27–34.
- ⁸ Puhl RM, Heuer CA. Obesity Stigma: Important Considerations for Public Health. *Am J Public Health*. 2010 June; 100(6): 1019–1028.
- ⁹ Thomas SL, Hyde J, Karunaratne A, et al. Being 'fat' in today's world: a qualitative study of the lived experiences of people with obesity in Australia. *Health Expect*. 2008 Dec; 11(4):321–330.
- ¹⁰ Puhl RM, Himmelstein MS, Hateley-Browne JL, et al. Weight stigma and diabetes stigma in U.S. adults with type 2 diabetes: Associations with diabetes self-care behaviors and perceptions of health care. *Diabetes Research and Clinical Practice*. 2020 Aug; 168.
- ¹¹ Knaak S, Mantler E, Szeto A. Mental illness-related stigma in healthcare. *Health Manage Forum*. 2017 Mar; 30(2): 111–116.

7

ABOUT THE FRAMEWORKS INSTITUTE

The FrameWorks Institute conducts and publishes research to help nonprofit organizations to expand their constituency, build support, and increase awareness of specific social issues. For fifteen years, FrameWorks has combined theories and research methods from the cognitive and social sciences to investigate how Americans view complex socio-political issues and how to expand those views most effectively through communications. Its staff of PhD-level anthropologists, linguists, sociologists, and political scientists develop methods to discover and document the "frames" on policy attitudes and to help translate those views to the public.

FrameWorks' narratives have been used by some of the most influential policymakers in the country. Because FrameWorks' pedagogical approach addresses the unique needs of adult learners in approaching this new body of work, it is able to point to entire coalitions of nonprofits, scientists and policy advocates who have adopted FrameWorks' language, implemented its recommendations, and become master framers of their issues to good effect.

Issue areas studied have included:

- Addiction
- Adolescent Mental Health
- Aging
- Budgets and Taxes
- Child Abuse
- Child Development
- Climate Change and Oceans
- Demographic Change
- Education
- Environment
- Environmental Health

- Food and Fitness
- Food Systems
- Gender Equity
- Global
 - Interdependence
- Government
- Health
- Human Services
- Immigration
- Race
- Rural Issues
- Science and Evidence
- Sexual Violence

An Introduction to Framing with the FrameWorks Institute

At d20, participants will work with the FrameWorks Institute, a communications think tank that investigates patterns in public thinking about social issues and how different narratives can be used to shift them. With their help, we will learn about "frame-changing" in diabetes and how to design new strategies and narratives for it.

Five Framing Tips: Framing for Social Change

By Nat Kendall-Taylor and Allison Stevens

How can we frame communications so that they drive social change? This question underlies the work that we do every day as researchers and practitioners who support nonprofit organizations. The good news is that this is an empirical question-one that we can answer through social science research. At the FrameWorks Institute, we conduct this kind of research to help nonprofits use the resulting strategies in their work on a wide range of issueseverything from early childhood development to aging, from addiction to equity, and climate change to immigration. Over nearly two decades, we have uncovered a set of framing truths. Here are a few:

Understanding is Frame-dependent. 1.

The way we frame our issues—the values, metaphors, examples, and tone we use in our communicationsdetermines how people think about them. Appealing to certain values—cultural beliefs and ideals—encourages people to think about social problems in new and productive ways. Metaphors can help people understand how a complex social or scientific issue works. Messages that explain how problems and solutions work elevate support for policy change.

THE diaTribe FOUNDATION (8)





We can study how frames affect public thinking to improve our work.

2. You are Not Your Audience.

We have found empirically what communications professionals know intuitively: The public does not respond to scientific, fact-based, jargon-filled arguments. Environmental experts may respond to statistics about threats to the spotted owl, but the public doesn't give a hoot. Facts alone do not help the public understand social problems or drive them to take action

3. Facts Do Matter.

Do facts work at all in our "post-truth" world? The answer is a qualified "yes." Facts do matter, but only if framed well. We have found that facts, when used in isolation, do not change how the public thinks about social issues. But when they are framed around empirically tested values or are followed by discussions of solutions, facts can have powerful effects on public thinking.

4. Correcting Misunderstandings Does Not Correct Misunderstandings.

Communications that take on and discredit myths do not correct misperceptions. In fact, these logical rhetorical strategies have a paradoxical effect: They reinforce people's existing positions and beliefs. What does work? Communications that explain why social or scientific phenomena matter, how they work, and what needs to be done to address them.

5. Crisis Messaging Leads to Crisis Fatigue.

The public is numb to crisis thanks to "emergency inflation;" focusing on the gravity and severity of problems to generate more clicks and higher ratings actually makes people see issues as less salient and positive change as impossible. We have found that messages that focus on crisis turn people off and depress their support for solutions. So instead of framing issues around phrases like "the immigration crisis" or "the silver tsunami," create messages that balance an explanation of the problem with solutionsoriented discussions. We've found this to be a much better way to engage the public in social change.

Source: This article was originally published in the <u>Public Relations Society of America Nonprofit and Association Chapter</u> newsletter. Nat Kendall-Taylor is CEO of the <u>FrameWorks Institute</u>, a communications think tank in Washington, D.C. Allison Stevens is FrameWorks' senior writer/editor.

DIVE DEEPER

- Highly recommended: For a case study on framing a persuasive advocacy message, see the Sargent Shriver National Center on Poverty Law's article, <u>Framing in Race-Conscious</u>, <u>Antipoverty Advocacy</u>.
- 2. For a more in depth exploration of the framing approach, see <u>FrameWork's Explanation</u> <u>Declaration: Unleashing the Power of How</u>.
- 3. For a 15-minute breakdown of the science of framing, see <u>CEO Nat Kendall Taylor's Ted Talk</u>.
- **4.** For a current global framing challenge in action: see Frameworks Institute's public resources on public health and COVID-19 communications.

APPENDIX A: Diabetes Ecosystem Map



APPENDIX B: Systems Mapping Process with Scott Spann— Interviews with Experts

diaTribe recruited systems mapping expert Scott Spann to create the diabetes ecosystems map. Spann has experience in several large-scale social change projects, ranging from consulting with Arthur Andersen to launching The Nature Conservancy's Texas office, and from serving as CEO/COO for VC firms to working with former guerrilla and indigenous leaders in Guatemala.

In order to create the diabetes ecosystem map, Spann interviewed the 21 experts in diabetes, epidemiology, and public health listed below.

ADAM BROWN

Close Concerns | Head, Diabetes Technology and Connected Care

ALAN MOSES

Novo Nordisk | Senior Vice President and Global Chief Medical Officer

CHERYL BETTIGOLE

Philadelphia Department of Public Health | Division Director for Chronic Disease Prevention

DARUISH MOZZAFARIAN

Tufts Friedman School of Nutrition Science and Policy | Dean and Jean Mayer Professor

DONNA RYAN American Association of Diabetes Educators | 2018 President

FAITH FOREMAN-HAYS Houston Health Department | Assistant Director

JAMES GAVIN Healing Our Village, Inc. | Chief Medical Officer SAM NUSSBAUM EBG Advisors, Inc. | Strategic Consultant

AKUA WOOLBRIGHT Whole Cities Foundation | National Nutrition Program Director

IRL HIRSCH University of Washington School of Medicine | Professor of Medicine

JAMES CORBETT Initium Health | Principal and Senior Consultant

JEFF HALPERN Abbott Diabetes Care | Senior Director of Marketing, Sensor Platform

KATHY REGAN The Commonwealth Fund | Executive VP and Chief Operating Officer

KELLY BROWNELL World Food Policy Center, Duke University | Director

KELLY CLOSE The diaTribe Foundation | Founder and Chair of the Board; Close Concerns | President

MANNY HERNANDEZ Livongo Health | SVP, Culture and Learning

MARGARET ANDERSON Deloitte Consulting | Managing Director, Federal Health Practice

THE diaTribe FOUNDATION

MICHAEL O'DONNELL

Art and Science of Health Promotion Institute | CEO

PRABJHOT SINGH

Icahn School of Medicine | Associate Professor of Medicine

URMIMALA SARKAR

UCSF Center for Vulnerable Populations | Associate Director

WILLIAM CEFALU

National Institute for Diabetes and Digestive and Kidney Diseases | Diabetes, Endocrinology, and Metabolic Diseases Director; American Diabetes Association | former President

For a full report of Spann's system mapping process, please see the <u>d19 Executive Summary</u>.





APPENDIX C: Tools and Terms from Prior dSeries Events

The dSeries

The annual Executive Innovation Lab event hosted by the diaTribe Foundation.

The dNetwork

The proposed name for the growing community of leaders that has been cultivated through the dSeries events. Through the dNetwork, dSeries participants engage in ongoing, high-impact aligned action to address type 2 diabetes in America.

The dSeries Steering Committee

The inaugural Steering Committee for the dSeries. The primary charge of this committee is to help prepare and plan for the transition from the dSeries to a dNetwork, to support the ecosystem map development process, and to support the establishment of a roadmap for the dNetwork to become the hub for high-impact aligned action to address type 2 diabetes in America.

Diabetes Ecosystem

This is the term we will use for the field of actors, organizations, interconnected systems and flows of information, resources, behaviors and mindsets that together make up the context for understanding diabetes in America. History, current state, emerging trends affecting prevention, prevalence, treatment, and the role of the disease in media, culture, and policy are all relevant for understanding the diabetes ecosystem. We use the term ecosystem because it is an excellent metaphor that makes room for nested and overlapping systems, and because in healthcare the term "system" has many meanings and uses already.

Aligned Action

This is the term we tend to use to refer to projects and activities that are coordinated across groups with shared interests in order to enhance impact for systems change. Aligned action requires slowing down to understand others' goals and incentives, to build trust and find win-win areas of shared interest, to co-create strategies and action plans, to coordinate and share information and amplify each other's efforts, and to learn and reflect together on progress. There are many synonyms for this approach, including collective action, collective impact, collaborative action, and network activities.

Systems Change

Actions that address root causes of systemic dynamics/problems over time and in turn shift the set-points and behavior patterns within a system. Systems change does not have to be intentional; climate change is an example of a change happening on our global atmospheric climate regulatory system based on the unintended consequence of fossil fuel emissions. Social movements like women's suffrage and gay rights represent intentional and successful systems change efforts, as do effective treatment interventions for diabetes.

Scenario Planning

Scenario Planning is a tool that helps us design and manage for an uncertain future not by asking 'What will happen' or 'What should happen'?, but rather 'What might happen?' This question acknowledges that the future is uncertain and often outside our control. By asking this question in a structured and creative way, scenario thinking can help groups identify new opportunities and challenges and begin to find a path toward a better future. Scenario planning lets us tell stories about the unknown future based



on known uncertainties, and these emerging stories help us see different ways the world might play out in the future. For more on what we learned from applying this tool to the diabetes landscape at d18, see our d18 summary report, available at <u>diatribe.org/foundation/dseries</u>.

Systems Thinking

Systems thinking helps us address root causes of problems rather than providing band-aid solutions. It also helps us avoid unintended consequences that actually make the problem worse due to lack of understanding of core systems dynamics (like feedback loops and time delays). Perhaps most useful for understanding systems thinking in brief is comparing it to more conventional thinking mindsets:

Strategic Question	Conventional Thinking Response	Systems Thinking Response
How are problems and causes connected?	Obvious, easy to trace	Indirect, not obvious (remember: systems problems are 'wicked')
What creates problems?	Others create them and so must be the source of the change	We unwittingly co-create problems and so can influence solving them through our own behavior change
Are Quick Fixes useful?	Yes. Short-term success assures long-term success	Often not. They can have unintended consequences and can have neutral to negative long-term impacts
How can we optimize the whole?	Optimize the parts (separately)	Improve relationships among parts
How should we approach initiatives/projects?	Take on many independent initiatives simultaneously	Focus on advancing a few key coordinated change initiatives sustained over time

Levers for Change/Leverage Points

These are places within a complex system where a small shift in one thing can produce big changes in everything. A useful reference here is Donella Meadow's famous short list of classic types of leverage points, in increasing order of effectiveness:

- 9 Constants, parameters, numbers (subsidies, taxes, standards).
- 8 Regulating negative feedback loops.
- 7 Driving positive feedback loops.
- 6 Material flows and nodes of material intersection.
- 5 Information flows.
- **4** The rules of the system (incentives, punishments, constraints).
- **3** The distribution of power over the rules of the system.
- **2** The goals of the system.
- 1 The mindset or paradigm out of which the system—its goals, power structure, rules, its culture—arises.





Levers for change are best determined by seeking input from many stakeholders across different parts of the system to determine areas where incentives and interests align with potential for impact. The work we have done at past events in combination with the additional interviews and research for the systems mapping process we are engaged with at d19 serve to help identify top levers for change. A lever has the potential for impact if it deeply impacts the system, is feasible, has a positive cost/benefit ratio, is sustainable over time, and is systemically viable.

Systems Leadership

Systems leadership is about how we behave in the face of complexity. It is a commitment to resist the temptation to oversimplify reality and instead increase the complexity of our own perspective to meet the challenges we face. It is about how we act both as individuals and together as leaders in service of long-term visions and goals for systems change. Systems leadership starts with a willingness to slow down to understand the whole of-in our case-the diabetes ecosystem in order to better achieve a desired purpose of reducing the incidence of type 2 diabetes in America. Systems leaders are also cross-sector leaders as all systems problems require reaching across the usual silos we operate in to enact powerful change. While systems leadership takes many forms, they are often called upon to serve as diplomats, connectors, visionaries, influencers, innovators, and strategists. Perhaps most importantly, systems leaders recognize that systems are perfectly designed to achieve the results they are achieving right now, and so they lead with curiosity and courage to ask and answer difficult questions, such as:

- Why have we been unable to solve this problem despite our best efforts?
- How might we be partly responsible, albeit unwittingly, for the problem?

- What are the payoffs to us of the current system?
- What might we have to give up for the whole to succeed?
- What might be unintended consequences of our previous and proposed solutions?
- How might we cultivate shared understanding, shared interests, shared ownership, shared action?
- Whose voices are we missing to truly sense into the whole?
- How and where can we model making explicit choices in service of our highest aspirations, in the face of many competing interests?
- How might we foster these systems leadership capacities in others?

Design Thinking/Human-Centered Design

Design thinking brings together what is desirable from a human point of view with what is technologically feasible and economically viable. It also allows people who aren't trained as designers to use creative activities to foster collaboration and solve problems in human-centered ways. As IDEO reminds us, there's really no single definition for design thinking—it's at once an idea, a strategy, a method, and a way of seeing the world. Generally, the approach involves framing a 'How might we' design question, gathering inspiration through a human-centered discover process of what people really need, brainstorming, prototyping and refining, and then crafting a story that inspires further action. Some highlights and principles that undergird design thinking include:

• Adopt a "beginner's mind," with the intent to remain open and curious, to assume nothing, and to see ambiguity as an opportunity.

- Dream up wild ideas, take time to tinker and test, and be willing to fail early and often.
- Embrace empathy, optimism, iteration, creativity, and ambiguity.
- Listen to and stay focused on the people you're designing for to arrive at optimal solutions that truly meet their needs.

We have engaged with design thinking to build shared understanding of challenges in diabetes in past dSeries events, and will use it again on Day 2 at d19 to help advance the top high leverage strategies we develop on Day 1. We think of the core design question for d19 itself as: How might we work together to curb the type 2 diabetes and prediabetes epidemic in America?

To learn more about past dSeries events, visit <u>https://diatribe.org/foundation/dseries</u>.







EXECUTIVE INNOVATION LAB IN DIABETES AND PREDIABETES

POWERED BY



WRITTEN BY KARENA YAN, MATTHEW GARZA, TOM CIRILLO, JIM CARROLL, AND KELLY CLOSE

www.diaTribe.org